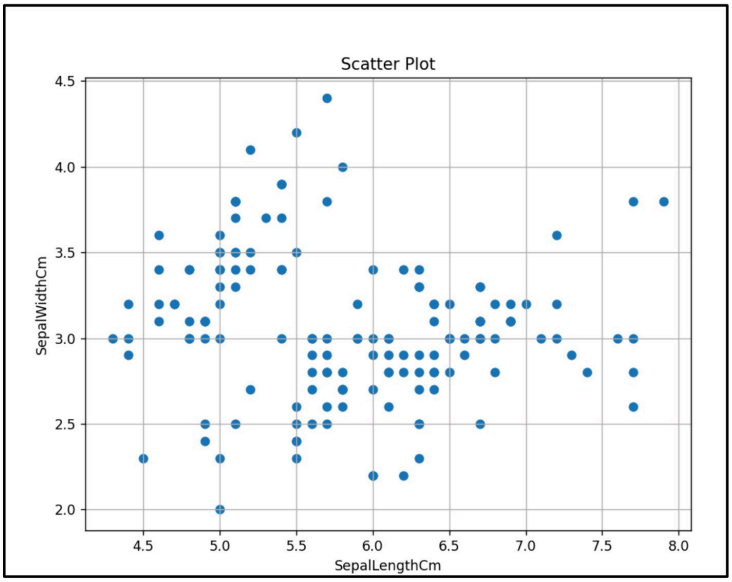
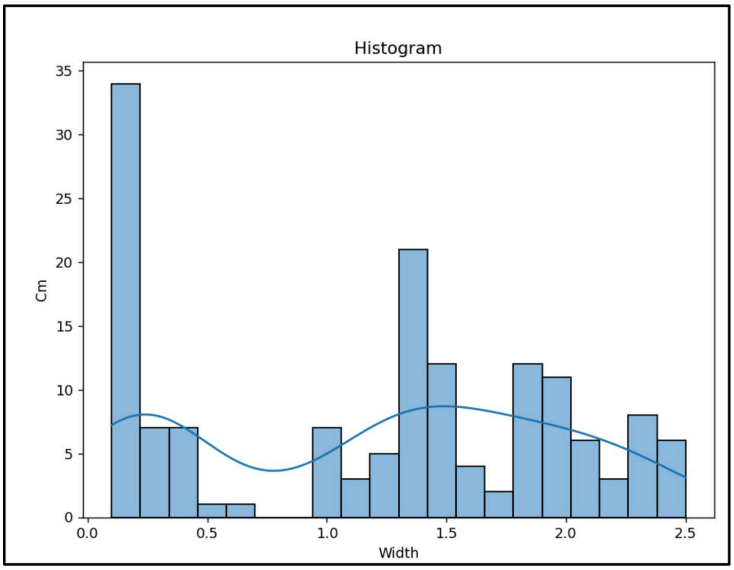
Practical – 8

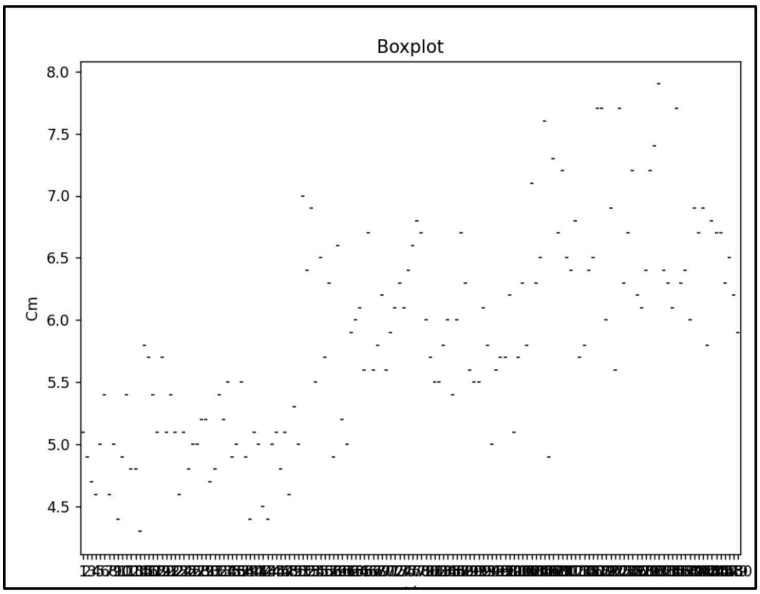
- **Pre-process row data using pandas and create different graph using matplotlib and seaborn.**
  PROGRAM CODE:

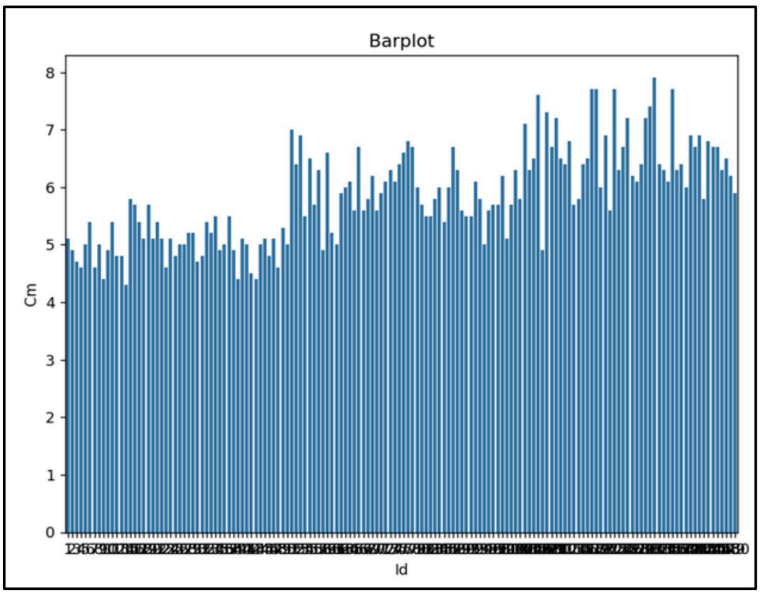
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sb
data =pd.read_csv('simple.csv')
# data.dropna(implace=True)
plt.figure(figsize=(8,6))
plt.scatter(data['SepalLengthCm'],data['SepalWidthCm'])
plt.title('Scatter Plot')
plt.xlabel('SepalLengthCm')
plt.ylabel('SepalWidthCm')
plt.grid(True)
plt.show()
# histogram
plt.figure(figsize=(8,6))
sb.histplot(data['PetalWidthCm'], bins=20,kde=True)
plt.title('Histogram')
plt.xlabel('Width')
plt.ylabel('Cm')
plt.show()
# boxplot
plt.figure(figsize=(8,6))
sb.boxplot(x='Id',y='SepalLengthCm',data=data)
plt.title('Boxplot')
plt.xlabel('Id')
plt.ylabel('Cm')
plt.show()
# bar plot
plt.figure(figsize=(8,6))
sb.barplot(x='Id',y='SepalLengthCm',data=data)
plt.title('Barplot')
plt.xlabel('Id')
plt.ylabel('Cm')
plt.show()
```

OUTPUT:


Scatter Plot
SepalWidthCm
SepalLengthCm
4.5
4.0
3.5
3.0
2.5
2.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0


Histogram
Cm
Width
35
30
25
20
15
10
5
0
0.0
0.5
1.0
1.5
2.0
2.5





CONCLUSION:

In this practical we learnt about many graph in seaborn,metplob etc.

Staff Signature:

Grade:

Remarks by the Staff: